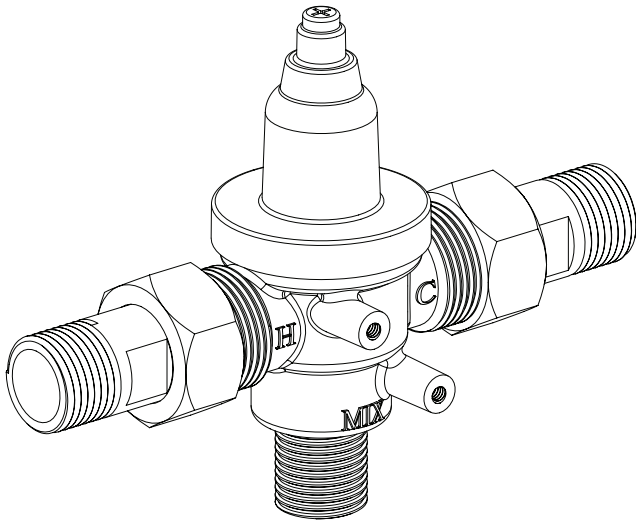


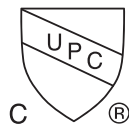
# Installation



## S59-4007

### Navigator® Thermostatic Mixing Valve for Sinks/Faucets

ASSE 1070 & cUPC certified



Pre-Installation Information . . . . .	2
Supplies and Tools Required . . . . .	2
Installation . . . . .	3
Troubleshooting . . . . .	4
Parts List . . . . .	4

Inlet Connections: 1/2" NPT

Outlet Connection: 1/2" NPT

Temperature Range: 95 – 125°F

Maximum Pressure: 125 PSIG

Inlet Temperature, Hot: 120 – 180°F

Inlet Temperature, Cold: 33 – 80°F

Minimum Temperature Differential (from valve set point): 10°F



## WARNING

Failure to comply with proper installation and maintenance instructions could contribute to the valve failure resulting in severe bodily injury including scalding, chilling, and/or death depending upon system water pressure changes and/or supply water temperature changes.

Use this Thermostatic Mixing Valve in accordance with ASSE standard 1070. This valve does not provide protection from pipe freezing.

Output temperature of the valve must be checked and adjusted at initial installation and on a quarterly basis.

Make sure that all water supply lines have been flushed and then completely turned off before beginning installation. Debris in supply lines can cause valves to malfunction.

## NOTICE

Regular checking and cleaning of the valve's internal components is necessary for maximum life and proper product function. Periodic inspection and yearly maintenance by a licensed contractor is required. Corrosive water conditions, and/or unauthorized adjustments or repairs could render the valve ineffective for its intended service. Frequency of cleaning and inspection depends upon local water conditions.

## IMPORTANT

Read this entire installation manual to ensure proper installation. When finished with the installation, file this manual with the owner or maintenance department. Compliance and conformity to local codes and ordinances is the responsibility of the installer.

Consult local building and plumbing codes prior to installation. Should these codes differ from the information in the Manual, follow the local codes. Inquire with governing authorities for additional local requirements.

Separate parts from packaging and make sure all parts are accounted for before discarding packaging material. If any parts are missing, do not begin installation until you obtain the missing parts.

Product warranties may be found under "Products" on our web site at [bradleycorp.com](http://bradleycorp.com).

### Supplies Required


- Shut-off on the outlet if tempered water is supplied to a remote location
- Shut-off on the inlets/supplies
- (2) #10 fasteners (and wall anchors, if necessary) for wall bracket

### Tools Required

- Adjustable Wrench
- Needle-Nose Pliers
- Phillips-Head Screwdriver

## 1 Assemble the Valve

**A** Install check valves into valve assembly as shown in the Parts List.

 Observe direction of arrow on check valve when assembling.

**B** Slide tailpiece nuts over tailpieces.

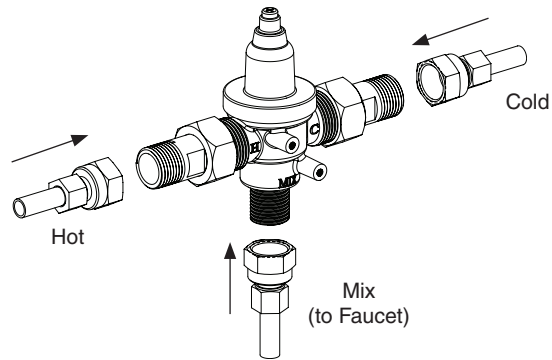
**C** Insert fiber washers between tailpieces and hot and cold inlets on the valve assembly. Tighten tailpiece nuts onto valve body.

## 2 Connect Supply Lines


**A** Thread hot and cold supplies to tailpieces. Thread mix outlet line to the valve body outlet.

**NOTICE!** If tailpieces need to be soldered to the hot and cold supplies, detach the tailpieces from valve assembly or the valve may be damaged.

**B** Pressurize the thermostatic mixing valve and check for pipe leaks.

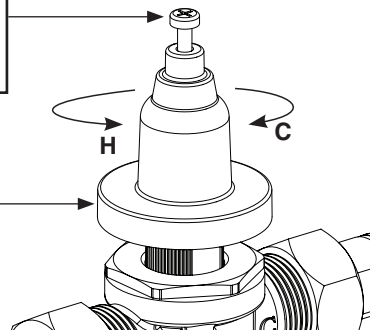


## 3 Adjust Temperature with Water Running

 This valve is NOT factory preset. Upon installation, the temperature of this valve must be checked and adjusted to ensure delivery of a safe water temperature. Water in excess of 110°F (43°C) may cause scalding.

**A** Loosen cap screw about 1/4" (4-6 turns) and lift up cover (do not remove)

**B** Using cover, turn cartridge gently until desired water temperature is reached. Do not turn past stops as this may damage unit. Push cover down and tighten screw.



## 4 Test Unit



**DO NOT SKIP THIS STEP!!!**

Shut the hot water inlet off by closing hot water inlet valve. While the hot water supply is turned off, check to make sure the cold water flow is reduced. If the cold water is reduced properly, reopen the hot water supply.

Shut the cold water inlet off by closing the cold water inlet valve. While the cold water supply is off, check to make sure that the hot water flow has shut down.

## Thermostatic Mixing Valve Troubleshooting



Before attempting to troubleshoot the valve or disassemble the components, check for the following conditions:

- If stop valves are used, make sure that they are fully open.
- Make sure that the hot and cold inlet pipes are connected properly, and that there are no cross-connections or leaking stop valves.
- Check the hot water heater output to make sure that it is at least 10° F above the set temperature.

Be sure to close the appropriate shut-off valves prior to disassembly of the valve and reopen the valves after inspection and repair is complete.

Problem	Cause	Solution
External leaks.	Damaged cartridge or O-rings.	Replace cartridge with part number 269-1927
Improper water temperature or temperature fluctuation.	Hot water supply is not 10° above desired set point.	Increase hot water supply temperature
	Valve temperature is not properly set.	Adjust the temperature as shown on page 3 step 2.
Limited water flow.	Dirt and debris have built up in the valve or strainer.	1. Check to make sure both hot and cold supplies are connected to the Navigator mixing valve and that they have water flow. 2. Remove cover and U-clip. Remove the cartridge and clean the strainer. It is not required to grease cartridge, however if desired, use silicone grease only. Do not use grease on check valves.

## Parts List

Item	Part No.	Description	Qty
1	118-333	Valve Body	1
2	269-1927	Thermostatic Cartridge	1
3	107-646	Hex Cap	1
4	107-582A	Cover, Lead Free Valve	1
5	160-463	Screw, M4X8 PN	1
6	198-012	Check Valve, 16mm	2
7	124-001AF	Rubber Washer	2
8	129-007	Tailpiece, Unplated	2
9	110-005	Nut, 1-1/16-14 Hex	2
10	S45-2976	Mounting Bracket Kit (Optional)	1

